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Subject: 4pi Pro & Tubes

Posted by [LuxmanLover](#) on Sun, 10 Nov 2002 12:51:53 GMT

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As previously posted I had the opportunity to hear what all the "tube buzz" (no pun intended) was all about. I won't reiterate the whole experience but there is magic in the tube sound in the right combo. Unfortunately the big motor in the 2226 based 4Pi pro is generating too much back EMF for the little SET amps to overcome (my best uneducated guess, please anyone jump in and rescue me on this one). Consequently, the bass is quite attenuated on a SET/4Pi pro system (the top end, mid range, imagining etc. is fantastic). Since most of us here are tweakers/fiddlers by nature I've been kicking a few ideas around of how to overcome this problem. I would like to keep the control and detail of the JBL professional drivers and still be able to drive them with a small SET amp, clearly the 2226H won't allow this so I began to look at the 2235H, which is also a 15" JBL driver that usually gets used for sub duty but has been used very successfully in JBL monitors. The zmax is lower on the 2235H than on the 2226H, so thats a good tube thing, also the motor is only a 150 watt piece vs the 600 watt motor on the 2226H, might be easier to drive(?). So whats the problem, well the 2226H has a nice smooth response up to 1500/1600 Hz where Wayne cross' them over to the PSD2002, however the 2235H gets pretty peaky after 800/900 Hz. On a previous post I asked about crossover attenuation hoping that I could get around the 5 Db dip in reponse that the 2002 has right around 1000 Hz. This 5 Db dip combined with the 5 Db peak on the 2235H probably wouldn't work out to be the best combo. Possible solution? If you look at the FR chart on the 2235H the off axis response flattens right out to 1000 Hz. So with that in mind what I think I'll try is to build a cabinet that has the HF horn on axis with the listener and the LF driver aligned straight ahead, my speakers are quite far apart so the LF drivers will be about 30 degrees off axis, cross the whole thing at 1000Hz (remember this will only see about 3 watts) and see how it sounds. KellyPlease keep in mind this is only my personal quest for knowledge and is in no way implying Waynes designs are flawed or inferior, quite the contrary.

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Subject: Sounds promising! Keep us updated.(nt)

Posted by [Garland](#) on Sun, 10 Nov 2002 15:52:24 GMT

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Subject: Re: 4pi Pro & Tubes

Posted by [bmar](#) on Sun, 10 Nov 2002 17:17:33 GMT

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ive never used a 2235 but it's a highly touted speaker. goes lower than the 2226 but not as high. I

think the best thing going is tubes on the top end and solid state on the bottom. lots people doing this

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Subject: Re: 4pi Pro & Tubes

Posted by [LuxmanLover](#) on Sun, 10 Nov 2002 18:28:55 GMT

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Thats what I've been hearing but for now I'll work with what I've got. It would be easy if I had a set of 2426's but I don't so I'll try the PSD2002 for now. But tube top and ss bottom does sound promising.Kelly

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Subject: Re: 4pi Pro & Tubes

Posted by [Wayne Parham](#) on Sun, 10 Nov 2002 19:42:20 GMT

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I've heard these kinds of comments more than once. There are a few SET amps that work with 2226H drivers, but most are a little bass shy. Run a push-pull or other amp with a little more power and it's perfect.

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Subject: Re: 4pi Pro & Tubes

Posted by [BillEpstein](#) on Sun, 10 Nov 2002 20:45:29 GMT

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I'm finding that the 30 watt receiver I've got driving the 4 Theatre's is giving me less bass than the Paramours. Huh? Then it dawned on me, the solid waste receiver has better control of the woofer; Ray Brown's bass doesn't have that much growl!This is especially true substituting the JBL cabinet with the 2226J's. But then I think I like the PSD 2002 top better than the 2618 (?) top.And the Paramours, at least at low level, are equally fabulous in the mids and mid bass on the JBL! Something to be said for Pro's with Eminence option.

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Subject: Re: 4pi Pro & Tubes

Posted by [spkrman57](#) on Mon, 11 Nov 2002 11:05:41 GMT

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Hi gang, Sneaking in to forum really quick at work, don't have opportunity often. To add to comments on 4 pi-pro, I just got my Dynaco ST-70 and Pas preamp back from my new acquaintance who is analog engineer and really likes tubes. Both units brought back to specs. With this combo on my 2226J (8 ohm to be installed later) and 2418 driver on 2373 horn (JBL 3677 cabinet). Robin Trower/Bridge of sighs (okay, not sure of title sp). Was very happy to hear bass my high damping solid state amps were lacking in. I think sometimes less controlled can be good as in the case of tube amps running speakers. My output EL34's are still burning in(4 new outputs), but sound quality is fabulous. I can think of only one change to make, and that is running Altec horns for the high end. The Altec horns/drivers IMHO are better matched to tubes, while the JBL horn/drivers are better suited for solid state. The Altec's when properly implemented have a deeper soundstage and do a better job of being invisible. That may be attributed to the fact that they are not perfect in response, but maybe the lacks of the Altec's and the lacks of the tube amps complement each other. TILLE, be sure and bring your 2-pi's for running on my Dynaco tubes. Mike Baker, try and make it Friday, do you hear me. Later gang, my bandwidth just ran out. I can't hit the forums very often until I get internet at home (sometime in 2003 I hope). My e-mail address is: [rsemega@cols.disa.mil](mailto:rsemega@cols.disa.mil) for anyone who wants to holler at me. Thanks, Ron

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